

ABSTRACT OF THE INVENTION

[0086] A method and system suitable for automated surveillance of intensive care unit patients for information denoting likelihood of in-hospital survival or mortality, represented in the timeseries of scoring systems such as APACHE III. Techniques from digital signal processing and Lyapunov stability analysis are combined in a method that allows for optimization of statistical hypothesis testing that is robust against short time series of as few as five time points. Once optimized, the method and system can achieve high-sensitivity high-specificity classification of survivorship, while avoiding false-positive prediction of mortality.